

PATENT APPLICATION
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q64035

Martin KOWATSCH

Appln. No. 09/832,827

Group Art Unit: 2874

Confirmation No.: 1954

Examiner: Sung H. PAK

Filed: April 12, 2001

For: OPTICAL WAVEGUIDE STRUCTURE AND METHOD FOR PRODUCING SUCH
WAVEGUIDE STRUCTURE

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §§ 1.97 and 1.98

Commissioner for Patents
Washington, D.C. 20231

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Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicant hereby notifies the U.S. Patent and Trademark Office of the documents which are listed on the attached PTO/SB/08 A & B (modified) (substitute for PTO Form 1449) form and/or listed herein and which the Examiner may deem material to patentability of the claims of the above-identified application.

One copy of each of the listed documents is submitted herewith.

The present Information Disclosure Statement is being filed (without a Statement Under 37 C.F.R. § 1.97(e)) after the later of three months from the application's filing date and the mailing date of the first Office Action on the merits, but before a Final Office Action, Notice of Allowance, or an action that otherwise closes prosecution in the application (whichever is earlier), and therefore a check for the fee of \$180.00 under 37 C.F.R. § 1.17(p) is attached. The

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INFORMATION DISCLOSURE STATEMENT
U.S. Appl. No. 09/832,827

Our Ref.: Q64035
Art Unit: 2874

USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

In compliance with the concise explanation requirement under 37 C.F.R. § 1.98(a)(3) for foreign language documents, Applicant submits the following explanations:

"Mikrostrukturen for die optische Kommunikation" by Prof. Dr. Andreas Neyer

Applicant submits that this article discloses a substrate with planar optical waveguides and a fiber attached thereon. The waveguides are formed by pouring a UV-curing monomer with a high refractive index than the surrounding substrate material into grooves formed on the substrate. The fiber lies in a V-groove of the substrate as disclosed in the Figures. The reference does not disclose crossings, and in particular does not disclose the use of fibers crossing in a crossing area on a substrate.

DE 37 41 284 A1

Applicant submits that this reference describes an optical fiber coupler built from optical fibers. Figure 1 discloses that the coupling and slitting regions are built from optical fibers.

DE 42 17 553 A1

Applicant submits that this reference discloses the attachment of external fibers to an I/O chip. Further, Applicant submits the following translations provided from the Derwent®

Database:

TITLE: Coupling optical fibres to optical component for communications system
- arranging bare fibre ends in unit over grooves then lowering into grooves for connection with component terminals.

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ABSTRACT: The method involves connecting the fibres (21) to a unit which comprises a polymer base (10) formed in one piece but having at least two sections, and a cover (31) for the base (10). The central section (11) of the base (10) has wave guides (17) forming individual components. The outer section (12) has grooves (14) to receive the fibres (21). The grooves (14) are aligned with the component inputs (18) and outputs (19). First, one or more of the fibres (21) to be coupled are held in position outside the base (10) so a fixed assembly set (22) can be formed from which the stripped ends of the fibres (21) project. Then, the fibre ends (25) are all cut across. The set (22) is arranged with the fibre ends (25) over the grooves (14) in the base (10) and lowered into the base (10). The fibre ends (25) are precisely adjusted by the groove edges (47). Finally, the cover (31) is brought into place. This presses the fibre ends (25) into the grooves (14) and fixes them in place. The core (46) of the fibres (21) are aligned with the components inputs (18) and outputs (19).

ADVANTAGE - Ensures quick coupling for low-cost assembly.

The submission of the listed documents is not intended as an admission that any such document constitutes prior art against the claims of the present application. Applicant does not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Respectfully submitted,



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Date: August 8, 2002

PTO/SB/08 A & B (modified)

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| Substitute for Form 1449 A & B/PTO | | Complete if Known | | | |
| | | Application Number | 09/832,827 | | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i> | | Confirmation Number | 1954 | | |
| | | Filing Date | April 12, 2001 | | |
| | | First Named Inventor | Martin KOWATSCH | | |
| | | Art Unit | 2874 | | |
| | | Examiner Name | Sung H. PAK | | |
| Sheet | 1 | of | 1 | Attorney Docket Number | Q64035 |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|-----------------------|-----------------|--------------------------------------|--------------------------------|---|
| Examiner Initials* | Cite No. ¹ | Document Number | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document |
| | | Number | Kind Code ² (if known) | | |
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| FOREIGN PATENT DOCUMENTS | | | | | | | |
|--------------------------|-----------------------|---------------------------|---------------------|--------------------------------------|--------------------------------|---|--------------------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | | | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Translation ⁴ |
| | | Country Code ² | Number ³ | Kind Code ² (if known) | | | |
| | | DE | 37 41 284 A1 | | June 15, 1999 | | No |
| | | DE | 42 17 553 A1 | | Dec. 2, 1993 | | No |
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| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS | | | |
|---|-----------------------|--|--------------------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city, and/or country where published. | Translation ⁴ |
| | | Funkshau 24 (1999), "Mikrostrukturen for die optische Kommunikation" by Prof. Dr. Andreas Neyer, pages 76-78. | No |
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| Examiner Signature | | Date Considered | |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov, MPEP 901.04 or in the comment box of this document. ³Enter Office that issued the document by the two-letter code (WIPO Standard ST. 3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. *Applicant is to indicate here if English language Translation is attached.